Informed Filler Plug-ins

This document contains detailed information that is specific to the Informed plug-ins included with Informed Filler. For general information about features that rely on Informed plug-ins, see the respective chapters of your *Informed Filler User's Manual*.

Informed Filler Plug-ins

Informed Designer allows the form designer to link form templates to a variety of external services. These include services such as electronic mail systems for forms routing, databases for automated lookups and form submission, and signing services for electronic approval of forms.

Most external services are accessed via Informed plug-ins. An Informed plug-in is a file that contains the code that interacts directly with the external service, acting much like an "extension" of the Informed Designer or Informed Filler application. By using plug-ins, Shana can easily support a new type of service by simply developing a new plug-in. Installation of a new plug-in enables Informed Designer and Informed Filler to access the new service.

Note

In previous versions of Informed, Informed plug-ins were called Informed extensions.

Different types of Informed plug-ins provide access to different types of services. The table below lists the different types of Informed plug-ins and the purpose of each.

Plug-in Type	Uses
Mail	Send completed forms using electronic mail.
Data access	Look up information from a database or data source. Submit completed forms to a database or data destination. Obtain unique form numbers from a database or data source. Track forms using a database or data source.
Signing	Sign and verify completed forms using Informed Filler.
Data translation	Import, export, or mail form data in a particular data format.
Distribution	Obtain form templates via a particular type of distribution center.
Spelling	Check the spelling of the text entered on a completed form using an alternate spell checking system.

In order for Informed Filler to utilize an Informed plug-in, the plug-in must be installed in your plug-ins folder. Your plug-ins folder is located inside your Informed folder. By default, your Informed folder is the folder that contains your Informed Filler folder (Windows) or application (Mac OS). This location can be viewed and changed using Informed Filler's Preferences command. For more information, see "Moving Folders" in Chapter 1, "Overview" of your *Informed Filler* User's Manual.

On Windows, the filename extension of a plug-in is one of "PLG," "PLD," or "PLF." For some plug-ins, separate versions are necessary for use with Informed Designer and Informed Filler. Informed Designer plug-ins have the "PLD" extension whereas Informed Filler plug-ins have the

"PLF" extensions. Plug-ins that work with both Informed Designer and Informed Filler have the "PLG" extension.

The remaining sections of this document provide information about the Informed plug-ins included with Informed Filler. Each section describes a particular type of Informed plug-in. Sections are included only for the types of plug-ins included with Informed Filler. Only features that are specific to each plug-in are described. For general information about a feature that relies on an Informed plug-in, see the respective chapters of your Informed Filler User's Manual.

Mail Plug-ins

Informed supports different e-mail systems on the Windows and Mac OS platforms. On Windows, a single mail plug-in may provide access to multiple different e-mail systems. The mail plug-ins included with Informed Filler are listed below.

Informed Mail Plug-ins for Windows

Mail System Supported	Plug-in Name	Mail System Type to Select
Microsoft Exchange	INFMAPI	Microsoft Exchange (MAPI)
Microsoft Mail	INFMAPI	Microsoft Mail (MAPI)
GroupWise	INFMAPI	GroupWise (MAPI)
Eudora Pro v2.2	INFMAPI	Eudora Pro (MAPI)
other MAPI compliant e-mail systems	INFMAPI	MAPI compliant
cc:Mail	MAIL	cc:Mail (VIM)
other VIM compliant e-mail systems	MAIL	VIM compliant
MHS compliant e-mail systems	MAIL	MHS Mail
message handling of Novell network	MAIL	MHS Local Mail
SMTP compliant e-mail systems	SMTPMail	Internet Mail (SMTP)
Sill compliant o man systems	51,1111,1411	micraet man (BMTT)

Informed Mail Plug-ins for Mac OS

Mail System Supported	Plug-in Name	Mail System Type to Select
Microsoft Mail	MSMail	Microsoft Mail
ccMail	ccMail	cc:Mail
Eudora	Eudora	Eudora
QuickMail	QuickMail	QuickMail
GroupWise TM	GroupWise	GroupWise
QuarterDeck Mail	QuarterDeck Mail	QuarterDeck Mail
PowerTalk TM	PowerTalk	PowerTalk
SMTP compliant e-mail systems	SMTPMail	Internet Mail (SMTP)

In order for an Informed mail plug-in to function properly, you must have the corresponding e-mail client software installed on your computer. Each different e-mail system has different system

4

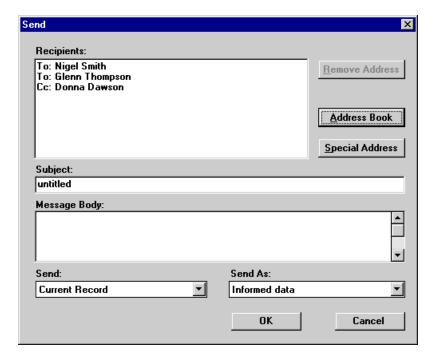
requirements and installation procedures. Please consult the documentation that came with your email system for this information.

When addressing a form or specifying the recipients for a suggested route, the dialog boxes that appear are specific to the type of e-mail system that you're using. They each provide a method for selecting recipients, specifying a subject, and choosing various send options.

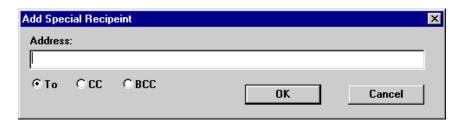
Addressing on Windows

MAPI Compliant Mail Systems

For Microsoft Exchange, Microsoft Mail, GroupWise, Eudora Pro, and other MAPI compliant e-mail systems on Windows, you'll see a dialog box similar to the one shown below.



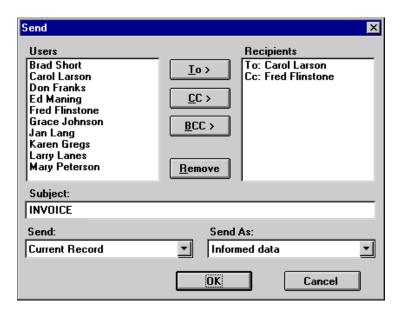
To select one or more recipients, click 'Address Book.' The dialog box you see is the same one you see whenever you address any message for your mail system. The addresses you select appear in the Recipients list on the Send dialog box. To enter an address that is not available on the addressing dialog box, click 'Special Address' and enter it by typing in the text box provided.



To remove a recipient, select the name in the Recipients list and click 'Remove Address.'

VIM and MHS Compliant Mail Systems

For cc:Mail and other VIM or MHS compliant e-mail systems on Windows, you'll see this dialog box:

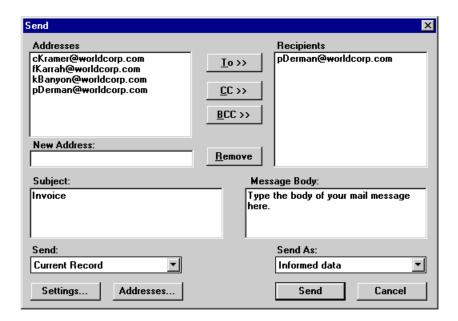


You select a person from the Users list then click 'To,' 'CC,' or 'BCC' to add the person to the recipients list. To remove a recipient, select the name in the Recipients list and click 'Remove.'

Addressing on Windows and Mac OS using SMTP

The SMTP (Simple Mail Transfer Protocol) plug-in allows Informed Filler to connect directly to your organization's SMTP server for sending forms over the internet.

When sending mail using SMTP on either Windows or Mac OS, you'll see the following dialog box:



You select a recipient from the Addresses list, then click 'To,' 'CC', or 'BCC' to add the person to the Recipients list. To enter an address that is not available in the Addresses list, simply type the address in the 'New Address' text box.



To remove a recipient, select the name in the recipients list, then click 'Remove.'

You must specify your SMTP server and e-mail address before you can send forms using the SMTP plug-in. To do this, click the 'Settings' button on the Send dialog box and enter the appropriate information on the Internet Mail Settings dialog box:



7

If you select the 'Always add new names to address book' option, any new recipients that you add on the Send dialog box will automatically be added to your address book.

Note

If you don't know the address of your SMTP server, contact your e-mail system administrator.

The SMTP Address Book

The list of addresses that you see on the SMTPMail Send dialog box can be obtained either from an internal SMTP address book that you create and maintain, or from an external address book such as the one associated with your e-mail system's client. To configure your address book, click the 'Addresses' button on the Send dialog box. The Configure Address Book dialog box appears.



The default setting for the SMTPMail address book is 'Internal.' You maintain this address book by manually adding, removing, changing, or importing addresses.

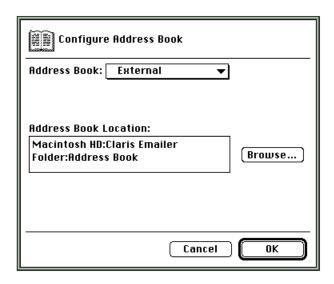
To add a new address, type the recipient's address in the 'New Address' text box, then click 'Add.' To remove an address, select it in the list, then click 'Remove.' To make changes to an existing address, select it in the list, make the appropriate changes in the 'New Address' text box, then click 'Change.'

If you want to add a number of addresses that already exist in another location, click the 'Import' button. The standard Open dialog box appears. Select a file to import, then click 'OK' (Windows) or 'Open' (Mac OS). The file is imported and the addresses are displayed in the internal SMTPMail address book. When you have finished adding or editing addresses, click 'OK.'

To use an external address book, click the 'Address Book' drop-down list and select 'External.'



The Configure Address Book dialog changes and displays the controls for specifying an external address book file.



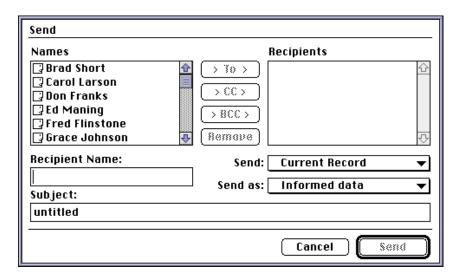
To select an external address book, click the 'Browse' button. The standard Open dialog box appears. Select a file, then click 'OK' (Windows) or 'Open' (Mac OS). The name and location of the external address book appears in 'Address Book Location' text box. Click 'OK.' All the addresses in your external address book now appear on the SMTPMail Send dialog box.

Note

The SMTP plug-in does not provide a "send later" capability. Therefore, you must have a live TCP/IP connection to your SMTP server when sending forms.

Addressing on Mac OS

For cc:Mail, Eudora, and GroupWise on Mac OS, you'll see this dialog box:



You can select a recipient by clicking a name in the Names list, or by typing a name in the 'Recipient name' text box, then clicking 'To,' 'CC,' or 'BCC.' To remove a recipient, select the name in the Recipients list and click 'Remove.' For information about how Informed Filler obtains the list of names to display in the Names list, see the following sections.

The Send dialog boxes for mailing forms with Microsoft Mail, QuarterDeck Mail, QuickMail, and PowerTalk are similar to the one used for cc:Mail, Eudora, and GroupWise. Any differences and features specific to the particular e-mail systems are described in later.

When you receive a form via electronic mail, the document will be available as an attachment to the mail message (for most e-mail systems). Many e-mail systems allow you to open an attached document by double-clicking its icon in the mail message. This is a convenient feature that means you don't have to extract the attachment before opening it. The following e-mail systems support this feature: Microsoft Exchange, Microsoft Mail, GroupWise, and Eudora Pro on Windows, and Eudora and PowerTalk on Mac OS. For other e-mail systems, it is necessary that you first extract the attached form data or package document before opening it with Informed Filler.

cc:Mail for Mac OS

Informed Filler interacts with cc:Mail using Apple events, the IAC (inter-applications communications) capabilities of the Mac OS (version 7.0 or later). The cc:Mail application must be running when you attempt to send a form from within Informed Filler. Also, problems may occur if you attempt to mail a form with the cc:Mail "Start New Message In" preference set to "Address Window." Do not use the "Address Window" setting when mailing a form with Informed Filler.

Due to a limitation in the cc:Mail software (Mac OS version only), Informed Filler is unable to directly read the cc:Mail directory list. To work around this limitation, an ASCII text file named 'ccMail Directory,' containing a copy of the directory list, is created and placed in your Informed Preferences folder (located either in your Informed folder or at the place specified on the Folders panel of Informed Filler's Preferences dialog box).

Note

Informed Filler cannot send forms to BBSs, mail folders, public or private mailing lists, or to fax recipients.

The creation and installation of the cc: Mail directory file is commonly the responsibility of the form designer or network administrator in your organization. Detailed information about the contents of this file can be found in the Informed Designer Plug-ins on-line manual that comes with Informed Designer.

Eudora for Mac OS

Informed Filler also interacts with Eudora using Apple events. When you send a form using Eudora, Informed Filler will automatically run the Eudora application if it is not already running.

Note

In order to send forms successfully, you must have Eudora's 'Immediate Send' switch selected. You set this switch using Eudora's Switches command. For more information, please consult your Eudora User Manual.

The Names list on the Send dialog box displays the list of nicknames that you've defined. You can add and remove names from this list using the Eudora application.

When you send a form using Eudora, Informed Filler will make the Eudora application the active application temporarily. This occurs because Eudora will send the form much faster if it is the active application.

GroupWise for Mac OS

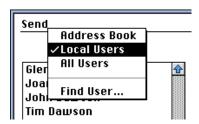
Informed Filler also interacts with GroupWise using Apple events. The GroupWise application must be running when you attempt to send a form with Informed Filler.

Due to a limitation in the GroupWise software (Mac OS version only), Informed Filler is unable to directly read the GroupWise directory and display its contents on the Send dialog box. To work around this limitation, an ASCII text file named 'GroupWise Directory,' containing a copy of the directory list, can be created and placed in your Informed Preferences folder (located either in your Informed folder or at the place specified on the Folders panel of Informed Filler's Preferences dialog box).

The creation and installation of the GroupWise directory file is commonly the responsibility of the form designer or network administrator in your organization. Detailed information about the contents of this file can be found in the *Informed Designer Plug-ins* on-line manual that comes with Informed Designer.

Microsoft Mail/QuarterDeck Mail for AppleTalk Networks

When sending forms using Microsoft Mail or QuarterDeck Mail, the Send dialog allows you to select recipients from your address book, from the list of local users, or from the list of all users. These options are available in the drop-down list above the scrolling list of names.



'Address Book' displays a personalized list of the user and group names you've added to the address book. 'Local Users' displays only the users on your mail server. 'All Users' displays all users on all the mail servers connected to your network.

You can also find a particular user by selecting the 'Find User' item from the same drop-down list and entering the name of interest.

QuickMail for Mac OS

Before you can send forms using QuickMail, the QuickMessenger system extension must be installed and configured so that it connects to the proper name server. To configure QuickMessenger, open the Chooser by selecting **Chooser** from the Apple menu. Locate the QuickMessenger icon and click it. Next, select the zone where the name server resides. Finally, select the appropriate name server from the list titled "Select a NameServer," then close the Chooser.

The first time you attempt to send a form using QuickMail, the QuickMail connection dialog appears.

Connect to QuickMail as:	
MailCenter	
Zone:	
Name	
Password:	
Next time: () Connect Automatically (a) Connect Manually	
Cancel OK	

To establish the connection, click the 'MailCenter' button. A dialog box appears displaying the various zones on your network. First select the zone where the QuickMail mail center resides. Next select the mail center and click 'OK.' Once you've selected the mail center, click the 'Name' button to identify yourself. A list of names appears. Select your name from the list, then click 'OK.' Next, enter your password in the 'Password' text box.

You can also specify whether Informed Filler is to display the QuickMail connection dialog box each time you send a form. The default setting, 'Connect Manually,' will display the connection dialog each time you send a form. To connect automatically without displaying the dialog box, click the 'Connect Automatically' option. Click 'OK' to dismiss the connection dialog box. The QuickMail connection information is stored in a file called QuickMail Preferences. This file is located in your Informed Preferences folder (located either in your Informed folder or at the place specified on the Folders panel of Informed Filler's Preferences dialog box).

The Send dialog box contains a 'Connect As...' button. Clicking this button displays the QuickMail connection dialog box (described earlier). You use this dialog box to change your connection information. For example, if you wish to change your password, or if the location of the QuickMail mail center has changed, you can reestablish your connection by clicking the 'Connect As...' button and entering different information. Another user can also use this feature to log on to their QuickMail account before sending a form.

QuickMail allows you to create multiple address books in order to better organize large lists of users. On the Send dialog box, you select an address book by choosing its name in the 'Address Book' drop-down list. The users in that address book will appear in the Names scrolling list. This list cannot contain more than 255 entries. Consequently, certain names might not appear in the list if the directory you select contains more than 255 users.

The 'Address Book' drop-down list contains an item named 'Find Other Names.' You can find names that might not appear in the Names list by choosing this item and entering a first and/or last name into the dialog box that appears. When you click 'OK,' the 'Names' list will display all names that matched those that you entered. Individual names can then be selected and added to the list of recipients.

The 'Priority' drop-down list allows you to assign a priority level to mailed messages. When you send a message, the priority level is displayed in the recipient's mailbox. When you assign a priority level, you are not affecting how quickly the template will be mailed. You are, however, indicating to the recipient the level of importance you place on the item.

PowerTalk for Mac OS

When sending forms using PowerTalk, the 'Send as' drop-down list on the Send dialog contains the 'Letter' format in addition to the other standard formats. A letter document is a document that applications such as AppleMail can open. Informed Filler cannot open letter documents.

When you send a form as a letter, the actual content of the letter is an image of the form. Unlike forms sent as Informed data or package documents, the recipient of a form sent as a letter cannot edit the form using Informed Filler. You should use the Letter format only if you're sending the form to a person who doesn't have Informed Filler, or if the form will be delivered via an imaging device such as a fax machine or printer.

The PowerTalk Send dialog box contains a 'Change Sender' button. This option allows you to send a form using your identity on another person's computer. When you click 'Change Sender,' a dialog box appears asking for your PowerShare account information. You use this dialog box to locate your PowerShare catalog and enter your name and password. Once you've entered your account information, you can mail your form to the recipient.

When you change the sender information, you are not interfering with the PowerShare account of the person whose computer you're using. Your sender identity is valid only for the specific form you send.

Data Access Plug-ins

Data access plug-ins provide an important link between Informed Filler and a wide variety of databases or data services. A data service can range anywhere from a simple text file on a file server to a high end SQL data server. A data service need not be a database. For example, with Informed's HTTP data access plug-in, the form designer can link form templates to a web server. The web server can, in turn, interact with other data services to perform requested tasks.

Data access plug-ins provide access to data services for different purposes. These purposes are listed below.

- Lookups to retrieve data from a data service while filling out a form
- Form submission to store the information on a completed form in a data service
- Auto-incrementing cells to obtain unique numbers from a data service
- Form tracking to track forms as they are routed using a particular data service

Not all data access plug-ins can be used for all of the above purposes. For example, although the Oracle data access plug-in supports lookups, form submission, auto-increment links, and form tracking, the HTTP plug-in can be used only for form submission. The table below shows the capabilities of each Informed data access plug-in.

Since the linking of a form template to a data service is commonly the responsibility of the form designer, the details specific to each data access plug-in are not provided here. This information can be found in the *Informed Designer Plug-ins* on-line manual included with Informed Designer.

Connections to Data Services

Before Informed Filler can access a data service, a connection to the service must be established. When configuring a link to a data service, the form designer specifies various connection parameters. The particular connection parameters vary depending on the type of data service that you're connecting to.

While using a form template, Informed Filler will connect to a data service only when necessary. For example, if a form template is configured to submit completed forms to a Sybase database, Informed Filler will connect to the database only if and when you request to submit a completed form. That way, if you do not submit any forms, accessing the data service is avoided.

Depending on the connection options selected by the form designer, you may be asked to enter connection parameters, such as a user ID and password, when access to a data service is needed. If, for example, the form designer did not provide the user ID and password for connection to a Sybase database, you'll see this dialog box when Informed Filler attempts to connect.



Once a connection is established, Informed Filler proceeds to perform the action for which the link is configured (lookup, form submission, auto-increment, or form tracking). Depending on a designer specified option, Informed Filler will either disconnect immediately following the action, or remain connected until you later close the form data document (which, in turn, closes the form template document).

When a connection to a data service is requested, Informed Filler checks if a connection to the specified service has already been established (as a result of a previous action). If so, and if the connection parameters are the same, Informed Filler will access the data service using the existing connection. For example, suppose that a cell is configured to look up information in the same Oracle database to which form submission is configured. Suppose also that the lookup connection is configured to disconnect when the template is closed. When you fill out the form and enter a value in the lookup cell, the lookup is triggered. This establishes a connection to the data service. The connection will remain active after the lookup has completed. You later choose to submit the form. Since a connection to the requested data service is already established, the form is submitted via that connection.

Signing Plug-ins

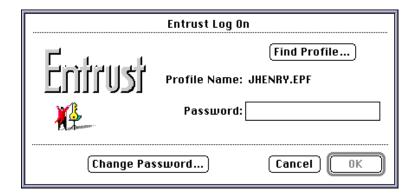
Chapter 4, "Using Digital Signatures," of your Informed Filler User's Manual explains how you can sign forms electronically and verify the integrity of digital signatures. These features rely on signing services and Informed signing plug-ins. Signing services include products or technologies such as Entrust by Nortel or DigiSign by Apple Computer.

Most signing services, including Nortel's Entrust, require installation and configuration. Most also require the administration of signing keys or profiles. Entrust, for example, requires that each user have a unique profile file that identifies the user for signing purposes. The administration of your signing service is often the responsibility of a security or network administrator.

Entrust by Nortel

Entrust by Nortel is a scalable security product that can offer different strengths of security and different infrastructures for key management. In order for the Informed Entrust signing plug-in to work, you must have a properly configured version of the Entrust client software installed on your computer. You must also have an Entrust profile, your unique personal identity for signing purposes.

When you sign a form, you are asked to log on to Entrust by typing your Entrust password.



In addition to logging on to Entrust, the Log on dialog box also allows you to change your Entrust password and choose a different Entrust profile. To change your password, click the 'Change Password...' button. A dialog box appears requesting that you enter your old password and the new password. To choose a different Entrust profile, click the 'Find Profile...' button. The method of finding a different profile depends on the method of key management used in your organization. Please contact your security or network administrator for more information.

After you sign a form or verify a digital signature for the first time, Informed Filler remains logged on to Entrust. That way, if you later choose to sign a form again, Informed Filler can do so without requesting that you log on again. You should be careful to never leave your computer unattended after you've authorized a template. Otherwise someone else might use your signing identity to sign forms. You can explicitly log off from Entrust by choosing **Log Off Service** from the Signatures submenu under Informed Filler's Edit menu.

DigiSign by Apple Computer

DigiSign comes with version 7.5 of the Mac OS. Also included is a demonstration signer file that you can use to try creating and verifying digital signatures. The steps you take to obtain your own personal signer file depend on how these files are administered in your organization.

When you sign a form using DigiSign, a dialog box appears requesting that you enter your Digi-Sign identification code.



For the demonstration signer file included with DigiSign, the identification code is "password." To sign using a different signer file, click the 'Signer...' button and select a different file. After you've selected the correct signer file and entered your identification code, click 'OK.' To cancel the command, click 'Cancel' instead.

When you authorize a template for the first time, Informed Filler remembers the identification code that you enter. That way, if you later choose to sign a form again, Informed Filler can do so without requesting you to enter your code again. You should be careful to never leave your computer unattended after you've signed a form. Otherwise someone else might use your signing identity to sign forms. You can explicitly log off from DigiSign by choosing Log Off Service from Informed Filler's Signatures submenu.

Verification of a form signed using DigiSign does not require that you enter your DigiSign identification code.

I-Sign™ by Shana Corporation

I-SignTM is Informed's built-in signing service that lets you create and verify digital signatures using your organization's existing e-mail system.

Most signing services require additional software and have fairly complex administration procedures. I-Sign is included free of charge with Informed, and is incredibly easy to set up and use. All you require is the I-Sign plug-in and a POP (Post Office Protocol) based mail system (or a mail system that allows POP access). Giving new employees the ability to create and verify signatures is as easy as adding their names to your e-mail system's address list.

Note

Like all Informed plug-ins, the I-Sign plug-in must be installed in your plug-ins folder inside your Informed folder.

Before you can use I-Sign to sign a form, you must set up your I-Sign plug-in by specifying the address of your POP server and your e-mail account. To do this, simply choose Preferences... from Informed Filler's Edit menu. When the Preferences dialog box appears, click the I-Sign icon in the scrolling list, then click the 'Set Preferences' button. Enter your information in the text boxes on the I-Sign Preferences panel and click 'OK.'



Note

If you do not specify your POP server address and e-mail account using the Preferences command, Informed Filler will display the I-Sign Preferences panel and request the information the first time you attempt to sign a form.

When you sign a form, the Logon dialog appears, requesting that you log on to your mail system by entering a password.



Enter your password, then click 'OK.' If you've logged onto your mail system successfully, I-Sign signs the form.

Once you've logged on and signed a form, Informed Filler remembers your password until you quit the application. That way, if you choose to sign another form, you can do so without having to enter your password. With that in mind, you should always log off your service if you're going to leave your computer unattended. Otherwise, someone else could use your signing identity to sign forms in your absence. To log off from I-Sign, choose Log Off Service from Informed Filler's Signatures submenu.

Like other signing services, I-Sign performs a data check to look for possible tampering when you verify a template or signature. For more information on signing forms and verifying templates, see Chapter 4 in your *Informed Filler User's Manual*.

Distribution Plug-ins

Chapter 14, "Form Template Distribution," of your Informed Filler User's Manual describes Informed's built-in forms distribution and revision control features. Also based on Informed plugins, these features allow you to access a distribution center to obtain new templates or check for new revisions of existing templates.

Access to a distribution center is accomplished through the use of Informed distribution service plug-ins. A distribution service plug-in enables distribution via a particular type of distribution service. Informed Filler includes distribution service plug-ins for distribution via file servers and FTP servers.

Access to a distribution center also requires a distribution center profile. A distribution center profile is a file containing the information that identifies the distribution center and specifies any parameters necessary to connect. Distribution center profiles are created and distributed by the form designer. They should be placed in your "DISTCTRS" (Windows) or "Distribution Centers" (Mac OS) folder. This folder is found in your "PREFS" (Windows) or "Preferences" (Mac OS) folder which, by default, is located in your Informed folder.

When a connection to a distribution center is needed, Informed Filler may request that you enter necessary connection parameters. For example, if you're connecting to a file server distribution center from a Mac OS compatible computer, you might be prompted to enter your user ID and password for the file server. Whether or not Informed Filler requests that you enter connection parameters depends on how the form designer configured the distribution center profile.

Detailed information about configuring distribution center profiles and the system requirements of Informed's distribution plug-ins can be found in the on-line manual Informed Designer Plug-ins included with Informed Designer.